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Dear sir

Re: PCT Application PCT/SG2003/000076
Title: Method and Apparatus for Assembling a 2-Piece Skin Door
Applicant: Malaysia Woodworking (Pte) Ltd
Our Ref: 1237.P002PCT

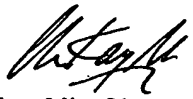
Thank you for your written opinion dated 16 April 2004.

To meet the novelty and inventive requirements, we have amended the claims as follows:
Old Claims 1, 2 and 3 have been combined into new Claim 1 to take advantage of the novel and inventive feature of old Claim 3.
Old Claim 3A has been deleted.
Old Claims 4, 5 and 6 have been combined into new Claim 2.
The remaining claims and their dependencies have been renumbered accordingly. These amendments add no new matter to the application.

Both the marked amended claim set and the original claim set as filed are attached.

We trust that you will find these amendments to be acceptable and we look forward to a positive second opinion. However, should it be necessary, we would like to make further amendments or to present other arguments in response to subsequent opinions.

Yours sincerely
LAWRENCE YD HO & ASSOCIATES PTE LTD



Kay-Min Chan

CLAIMS

1. A method for assembling a 2-piece skin door comprising a bottom skin and a top skin wherein each of the bottom and top skins' longitudinal edges have been bent and folded to complementarily hem each other in an interlocking manner to form a seam, the method including:

- holding the bottom skin in an upwardly open pan manner to form the full thickness of the door edge and the ends of the bent portion is folded outwardly to form a downward flange which is flush with the outer door edge;
- holding the top skin in an inverted pan manner wherein its folded and hemmed edges are bent downwardly to form less than the full thickness of the door edge and the ends of the bent portion is folded inwardly to form an upward flange aligned with the corresponding edges of the bottom skin; and
- pushing the top skin to insert said top skin's folded edge into the bottom skin's corresponding folded edge to form said interlocking seam and thus the door edge;

wherein

the top skin's longitudinal edges form about half the thickness of the door edge.

2. A method according to Claim 1 wherein the bottom skin is held securely on a substantially planar surface with at least one securing means; the at least one securing means

fastening onto at least one protruding plate welded onto the inside of the bottom skin and further provided with eyelets from the rail edges of said skin for hook means to fasten thereunto.

3. A method according to Claim 1 wherein the top skin is provided with at least a protrusion from the rail edge of said skin and pulling means is provided to fasten onto said protrusion and to pull said skin in alignment towards the bottom skin.

4. A method according to Claim 3 wherein the protrusion is a protruding plate welded onto the inside of the top skin and provided with eyelets for hook means to fasten thereunto.

5. A method according to any one of Claims 3 and 4 wherein the pulling means comprises at least a winch capable of winding a cable attached to said hook means to pull said top skin.

6. A method according to any one of Claims 3 to 5 wherein the pulling means comprises at least a winch capable of winding a cable attached to a bar arranged to push the top skin in alignment towards the bottom skin.

7. A method according to Claims 5 and 6 wherein a first winch pulling the top skin is employed in conjunction with a second winch pulling a bar to push said top skin.

8. A method according to Claim 7 wherein the second winch is mounted distal to the full length of the bottom skin underneath the planar surface which provides for a break in the surface for the flow of cable being winched by said second winch.

9. A method according to Claim 8 wherein the second which is substituted with a reversible rotation motor and the cable forms a loop around the distal half of the planar surface so that the pushing bar may be withdrawn from a completely assembled door back to the distal end to enable the next top skin to be placed onto said distal planar surface.

10. An apparatus for assembling a 2-piece skin door comprising a bottom skin and a top skin wherein each of the bottom skins' longitudinal edges have been bent and folded to mutually hem each other to form a door edge seam when slotted into one another, said apparatus including:

- a planar surface area sufficiently for laying each a bottom and a top skin longitudinally end to end, said surface comprising
  - a proximal surface portion for laying the bottom skin in an upwardly open pan manner;
  - a distal surface portion for laying the top skin in an inverted pan manner;
- fastening means for securely holding the bottom skin onto said proximal surface with its folded edge in alignment with the corresponding edges of the top skin;

- means for moving the aligned top skin to insert said top skin's folded edge into the bottom skin's corresponding folded edge to form said door edge seam.

11. An apparatus according to Claim 10 wherein the fastening means comprises hook, cable, and screw means to hold onto protrusions from the bottom skin.

12. An apparatus according to Claim 10 wherein the means for moving the top skin comprises at least a winch mounted below the proximal end of the planar surface and is capable of moving said top skin so that said top skin's folded edges may be received into the corresponding bottom skin's folded edges by winding a cable attached to a hook means fastened to a protrusion from the proximal rail edge of said top edge.

13. An apparatus according to any of Claims 10 and 12 wherein the protrusion comprises at least one plate welded onto the rail edge of the top skin to protrude therefrom.

14. An apparatus according to Claim 10 wherein the means for moving the top skin comprises at least a winch mounted below the proximal end of the planar surface and is capable of pushing the top skin so that said top skin's folded edges maybe received into the corresponding bottom skin's folded edges by winding a cable attached to an end push bar to push the distal rail edge of said top skin.

15. An apparatus according to Claim 14, the planar surface is provided with an opening between the proximal and distal

surface portions to allow for cables to be pulled by a winch mounted below the distal surface portion.

16. An apparatus according to Claim 15 wherein the proximal and distal surface portions are each detached bench surface portions.

17. An apparatus according to any one of Claims 10, 15 and 16 wherein the means for moving the top skin comprises the end push bar connected to an endless cable pulled by a reversible motor.

18. An apparatus according to any one of Claims 10 to 17 wherein guide means are provided to secure and align the bottom skin to receive the top skin and to guide the end push bar's movement.

19. A door assembled according to a method of any one of Claims 1 to 9.

20. A door assembled with an apparatus according to any one of Claims 10 to 19.

CLAIMS

1. A method for assembling a 2-piece skin door comprising a bottom skin and a top skin wherein each of the bottom and top skins' longitudinal edges have been bent and folded to complementarily hem each other in an interlocking manner to form a seam, the method including"

- holding the bottom skin in an upwardly open pan manner;
- holding the top skin in an inverted pan manner wherein its folded and hemmed edges are aligned with the corresponding edges of the bottom skin; and
- pushing the top skin to insert said top skin's folded edge into the bottom skin's corresponding folded edge to form said interlocking seam.

2. A method according to Claim 1 wherein:

- the bottom skin's longitudinal edges are each bent upwardly to form the full thickness of the door edge and the ends of the bent portion is folded outwardly to form a downward flange which is flush with the outer door edge; and
- the top skin's longitudinal edges are bent downwardly to form less than the full thickness of the door edge and the ends of the bent portion is folded inwardly to form an upward flange to complementarily interlock with the bottom skin's folded ends to form the door edge.

3. A method according to Claim 2 wherein the top skin's longitudinal edges are bent downwardly to form about half the thickness of the door edge.

3A. A method according to Claim 1 wherein the interlocking seams are provided at diagonally-opposing edges of the assembled door comprising the top and bottom skins.

4. A method according to Claim 1 wherein the bottom skin is held securely on a substantially planar surface with securing means.

5. A method according to Claim 4 wherein the securing means secure the bottom skin by fastening onto at least a protrusion from the rail edges of said skin.

6. A method according to Claim 5 wherein the protrusion is a protruding plate welded onto the inside of the bottom skin and provided with eyelets for hook means to fasten thereunto.

7. A method according to Claims 1 wherein the top skin is provided with at least a protrusion from the rail edge of said skin and pulling means is provided to fasten onto said protrusion and to pull said skin in alignment towards the bottom skin.

8. A method according to Claim 7 wherein the protrusion is a protruding plate welded onto the inside of the top skin and provided with eyelets for hook means to fasten thereunto.

9. A method according to any one of Claims 7 and 8 wherein the pulling means comprises at least a winch capable of winding a cable attached to said hook means to pull said top skin.

10. A method according to any one of Claims 7 to 9 wherein the pulling means comprises at least a winch capable of winding a cable attached to a bar arranged to push the top skin in alignment towards the bottom skin.

11. A method according to Claims 9 and 10 wherein a first winch pulling the top skin is employed in conjunction with a second winch pulling a bar to push said top skin.

12. A method according to Claim 11 wherein the second winch is mounted distal to the full length of the bottom skin underneath the planar surface which provides for a break in the surface for the flow of cable being winched by said second winch.

13. A method according to Claim 12 wherein the second which is substituted with a reversible rotation motor and the cable forms a loop around the distal half of the planar surface so that the pushing bar may be withdrawn from a completely assembled door back to the distal end to enable the next top skin to be placed onto said distal planar surface.

14. An apparatus for assembling a 2-piece skin door comprising a bottom skin and a top skin wherein each of the bottom skins' longitudinal edges have been bent and folded to mutually hem each other to form a door edge seam when slotted into one another, said apparatus including:

- a planar surface area sufficiently for laying each a bottom and a top skin longitudinally end to end, said surface comprising
  - a proximal surface portion for laying the bottom skin in an upwardly open pan manner;
  - a distal surface portion for laying the top skin in an inverted pan manner;
- fastening means for securely holding the bottom skin onto said proximal surface with its folded edge in alignment with the corresponding edges of the top skin;
- means for moving the aligned top skin to insert said top skin's folded edge into the bottom skin's corresponding folded edge to form said door edge seam.

15. An apparatus according to Claim 14 wherein the fastening means comprises hook, cable, and screw means to hold onto protrusions from the bottom skin.

16. An apparatus according to Claim 14 wherein the means for moving the top skin comprises at least a winch mounted below the proximal end of the planar surface and is capable of moving said top skin so that said top skin's folded edges may be received into the corresponding bottom skin's folded edges by winding a cable attached to a hook means

fastened to a protrusion from the proximal rail edge of said top edge.

17. An apparatus according to any of Claims 14 and 16 wherein the protrusion comprises at least one plate welded onto the rail edge of the top skin to protrude therefrom.

18. An apparatus according to Claim 14 wherein the means for moving the top skin comprises at least a winch mounted below the proximal end of the planar surface and is capable of pushing the top skin so that said top skin's folded edges maybe received into the corresponding bottom skin's folded edges by winding a cable attached to an end push bar to push the distal rail edge of said top skin.

19. An apparatus according to Claim 18, the planar surface is provided with an opening between the proximal and distal surface portions to allow for cables to be pulled by a winch mounted below the distal surface portion.

20. An apparatus according to Claim 19 wherein the proximal and distal surface portions are each detached bench surface portions.

21. An apparatus according to any one of Claims 14, 19 and 20 wherein the means for moving the top skin comprises the end push bar connected to an endless cable pulled by a reversible motor.

22. An apparatus according to any one of Claims 14 to 21 wherein guide means are provided to secure and align the

bottom skin to receive the top skin and to guide the end push bar's movement.

23. A door assembled according to a method of any one of Claims 1 to 13.

24. A door assembled with an apparatus according to any one of Claims 14 to 22.